

Jay Bennett

Director  
Federal Regulatory Relations

1275 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
(202) 383-6429  
Fax: (202) 347-1720

**PACIFIC X TELESIS**  
Group - Washington

July 25, 1996

**EX PARTE**

William F. Caton  
Acting Secretary  
Federal Communications Commission  
Mail Stop 1170  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

Dear Mr. Caton:

Re: CC Docket Nos. 91-141 and 96-98

Today the attached information was delivered to Mr. Charles Needy in response to his request. This material was previously submitted to the Common Carrier Bureau in 1993 in response to the Bureau's written requests. Please associate this with the above referenced proceedings.

We are submitting two copies of this notice in accordance with Section 1.1206(a)(1) of the Commission's rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions.

Sincerely,



Attachments

cc: C. Needy

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JUL 25 1996

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OFFICE OF SECRETARY

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Jay Bennett  
Director  
Federal Regulatory Relations

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**PACIFIC**  **TELESIS**  
Group - Washington

July 25, 1996

Mr. Charles Needy  
Accounting and Audits Division  
Federal Communications Commission  
2000 L Street, NW, Room 812  
Washington, DC 20554

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JUL 25 1996  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Dear Mr. Needy:

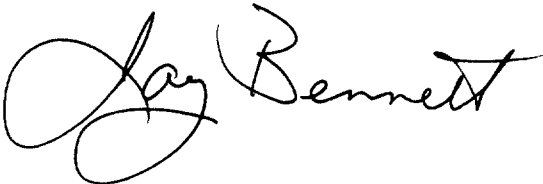
Re: CC Docket Nos. 91-141 and 96-98. Ex Parte submission

Per your request, we are submitting the attached four documents for inclusion in the record in the above proceedings. The documents, which we previously submitted to the Common Carrier Bureau in response to its requests, are 1) our January 15, 1993 submittal of cost studies in response to the December 18, 1992 request, 2) our January 22, 1993 erratum, 3) our May 14, 1993 response to the April 23, 1993 request, and 4) our October 15, 1993 letter from Al Swan of Pacific Bell replying to Gregory J. Vogt, Chief Tariff Division.

This cost data established that our prices for certain high capacity elements covered average variable costs and were just, reasonable, and non-discriminatory.<sup>1</sup>

Please call me if you wish to discuss this matter further.

Sincerely,



Attachments

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<sup>1</sup> For price floors, however, Pacific Bell is embracing a different cost methodology, namely a total service long-run incremental cost ("TSLRIC")-based methodology.

January 15, 1993

Cheryl A. Tritt  
Chief, Common Carrier Bureau  
Federal Communications Commission  
1919 "M" Street, NW - Room 222  
Washington, DC 20554

Dear Ms. Tritt:

Re: *Cost Studies in Response to December 18, 1992 Request*

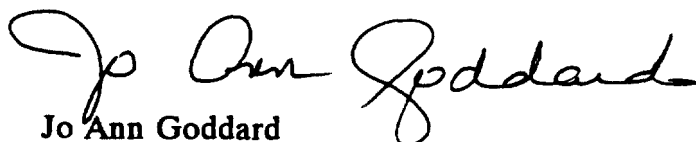
Attached is the cost support in response to your December 18, 1992 letter for:

- (a) high capacity channel terminations with terminal equipment (electrical interface) under the DS3x12 Rate Stability Payment Plan - 5 Year Plan, including monthly rates and nonrecurring charges, and
- (b) high capacity channel mileage for 44.736 Mbps, including rates and nonrecurring charges.

The rates referenced in (a) and (b) above were filed as within-band filings. Pacific Bell introduced DS3 rates in Transmittal No. 1438 filed on November 15, 1989, effective March 1, 1990 and DS3x12 was introduced in Transmittal No. 1506 filed on October 31, 1990, effective January 1, 1991. The attached studies demonstrate that the rates (1) cover average variable costs and (2) are just, reasonable, and non-discriminatory; therefore, had these rates been filed as below-band filings, they would have met the tariff review standards adopted in the LEC Price Cap Order.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,



Jo Ann Goddard

Attachment

cc: Tariff Division (2 copies)  
Policy and Program Planning Division (2 copies)  
Downtown Copy Center

## Pacific Bell Cost Methodology

### 1.1 OVERVIEW

Pacific Bell identified the average variable costs associated with DS3x12, 5 yr. term Channel Termination and DS3 Interoffice Mileage based on an analysis of plant and equipment used to provide service. The Channel Termination portion of this service includes costs incurred for plant and equipment used to connect the customer location with the Pacific Bell central office. It includes fiber optic terminals with 12 DS3 capacity at the customer location and at the central office. It also includes exchange fiber plant connecting the fiber optic terminals and conduit used to protect the fiber.

The DS3 Interoffice Mileage costs were identified for Mileage Variable and Mileage Fixed. Mileage Variable cost are distance sensitive and are expressed on a "per mile" basis. Included here are the costs associated with interoffice fiber and conduit. Mileage Fixed costs are expressed on a "per channel" basis and are not distance sensitive. Included are the cost associated fiber optic terminal equipment at each central office.

This study is forward looking in that current costs and average expected plant and equipment utilization factors were used to determine unit investment. Historical factors were applied to Digital Central Office Equipment investment to determine the Land, Building and Common investment loading appropriate for this product. Cost factors appropriate to each investment account were used to identify the capital and maintenance costs. Non reusable investment was capitalized over the 5 year term of the service. Administrative costs were based on the historical relationship between administrative expenses and total investment related expenses for Interstate Special Access products.

Page 1 and 2 following summarize the costs and revenues associated with DS3x12 Channel Terminations and DS3 Interoffice Mileage. The cost relationship calculations specified by the commission as a standard for tariff review are also shown on these pages.

### 1.2 UNIT INVESTMENTS

Unit investment by USOA accounts were identified from current costs for fiber optic terminals (Digital Circuit Equipment, Account 223210) and Fiber exchange plant (Account 242200). Unit investment calculations included appropriate utilization factors reflecting the average expected utilization of the plant or equipment over its economic life. Non reusable investment was capitalized over the 5 year term of this service. Land and Building investment were developed based on the historical relationships between accounts for Digital Circuit Equipment (Account 223210) and the associated Land (Account 211100) and Building (Account 212100) required to house the equipment. Exchange fiber investment was based on the average serving length and expected average plant utilization. Conduit investment (Account 244149) was based on a proration of conduit investment to fiber plant. Gross investment by USOA account is identified at Line 9 on pages 3, 4 and 5 for DS3x12 Channel Terminations and on pages 6, 7, and 8 for DS3 Interoffice Mileage.

## Pacific Bell Cost Methodology

JUL 25 1996

### 1.3 COST FACTORS AND CAPITAL COSTS

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

The depreciation rates applied to each USOA account are those prescribed by the commission. The depreciation factor shown on line 6, pages 3 through 8, produces total depreciation expense for each investment account.

The repair and maintenance factors are developed by dividing the total Repair and Maintenance expenses (Account 6220) associated with each account by gross investment in the account. The repair and maintenance factor shown on line 7, pages 3 through 8 produce repair and maintenance expense for Fiber and Conduit investment, Digital Circuit Equipment investment and the associated Land and Building investment.

The Cost of Money and Income Taxes represents Pacific Bell's allowed return on undepreciated plant. Undepreciated plant by capital account is determined by using a Net Plant factor which is the relationship between gross investment and accumulated depreciation. The undepreciated plant amount is multiplied by the Return and Income Tax "RIT" factor to calculate return on investment and income tax for each plant account. The Net Plant and RIT factors specific to each account are identified on lines 1 and 2, on pages 3 through 8. The Cost of Money and State and Federal Tax factors are shown on lines 4 and 5, pages 3 through 8.

The remaining cost accounts are Sales (Account 6612 and 6613); Marketing and Product Management (Account 6611); Customer Service (Account 6623); Operator Services (Account 6621 and 6622); Accounting (Account 6623 and 6721); Human Resources (Account 6723); Other General Expenses (Account 6724, 6726, 6728, 6533); Operating Taxes (Account 7240); and Amount Charged Construction (Account 7340).

The cost factor for the above accounts is calculated by dividing the total interstate special access expenses in these accounts by the sum of Depreciation, Repair and Maintenance, Cost of Money, and Taxes associated with Interstate Special Access. The resulting total is the administration cost factor on line 7, pages 3 through 8.

Repair and Maintenance, Cost of Money, State and Federal Taxes, and Depreciation are calculated by multiplying the account specific factors by gross investment. Administration expenses are calculated by multiplying the factor by the total of Depreciation, Repair and Maintenance, Cost of Money, and State and Federal Taxes.

### 1.4 NONRECURRING COSTS

Nonrecurring cost were determined in the following manner. First, the work groups involved in installing this service were identified. Next, the specific tasks necessary to provision a DS3x12 circuit and average time to accomplish them were identified. Task times were multiplied by the appropriate labor rate to determine the costs associated with

### **Pacific Bell Cost Methodology**

each work group. Finally work group totals were summed to identify total costs for installation. The nonrecurring cost and revenue are displayed at lines 14 and 15 on page 1, COST SUMMARY.

**COST SUMMARY, PER CHANNEL TERMINATION**

<b>1 Gross Investment</b>	<b>\$384,497</b>	<b>See Section 1.2</b>
<b><u>Annual Cost</u></b>		
2 Cost of Money	\$24,541	See Section 1.3
3 State & Fed Taxes	\$9,652	See Section 1.3
4 Depreciation	\$29,771	See Section 1.3
5 Repair and Maintenance	\$5,319	See Section 1.3
6 Subtotal of Expenses	\$69,283	
7 Administration	\$22,240	See Section 1.3
8 <b>Total Direct Cost</b>	<b>\$91,523</b>	<b>Ln 7 + Ln 8</b>
9 <b>Monthly Cost</b>	<b>\$7,627</b>	<b>Ln 8/12</b>
10 <b>Monthly Rate</b>	<b>\$9,982</b>	<b>Pacific Bell FCC 128 Tariff</b>
11 <b>Cost/ Unit Investment</b>	<b>0.2380</b>	<b>Line 8/ Line 1</b>
12 <b>Cost/ Mon. Rate</b>	<b>0.7641</b>	<b>Line 9/ Line 10</b>
13 <b>Exp less Admin/ Exp Tot.</b>	<b>0.7570</b>	<b>Line 6/ Line 8</b>
<b>SOURCE, Lines 1-7</b>		
Line 1: Pg 3 Ln 9 Total + Pg 4 Ln 9 Total + Pg 5 Ln 9 Total		
Line 2: Pg 3 Ln 10 Total + Pg 4 Ln 10 Total + Pg 5 Ln 10 Total		
Line 3: Pg 3 Ln 11 Total + Pg 4 Ln 11 Total + Pg 5 Ln 11 Total		
Line 4: Pg 3 Ln 12 Total + Pg 4 Ln 12 Total + Pg 5 Ln 12 Total		
Line 5: Pg 3 Ln 13 Total + Pg 4 Ln 13 Total + Pg 5 Ln 13 Total		
Line 6: Pg 3 Ln 14 Total + Pg 4 Ln 14 Total + Pg 5 Ln 14 Total		
Line 7: Pg 3 Ln 15 Total + Pg 4 Ln 15 Total + Pg 5 Ln 15 Total		
14 <b>Nonrecurring Costs</b>	<b>\$4,970</b>	<b>See Section 1.4</b>
15 <b>Nonrecurring Rate</b>	<b>\$17,000</b>	<b>Pacific Bell FCC 128 Tariff</b>
16 <b>NR Cost/ Rate</b>	<b>0.2924</b>	<b>Line 14/ Line 15</b>

**COST SUMMARY, DS3 INTEROFFICE MILEAGE**

	PER MILE	FIXED	
1 <b><u>Gross Investment</u></b>	\$1,748	\$26,525	See Section 1.2
<b><u>Annual Cost</u></b>			
2 Cost of Money	\$126	\$1,591	See Section 1.3
3 State & Fed Taxes	\$50	\$618	See Section 1.3
4 Depreciation	\$118	\$2,065	See Section 1.3
5 Repair and Maintenance	\$6	\$415	See Section 1.3
6 Subtotal of Expenses	\$300	\$4,689	
7 Administration	\$96	\$1,505	See Section 1.3
8 <b>Total Direct Cost</b>	\$396	\$6,194	Ln 7 + Ln 8
9 <b>Monthly Cost</b>	\$33	\$516	Ln 8/12
10 <b>Monthly Rate</b>	\$43.70	\$833.14	Pacific Bell FCC 128 Tariff
11 Cost/Unit Investment	0.2267	0.2335	Line 8/ Line 1
12 Cost/ Monthly Rate	0.7557	0.6196	Line 9/ Line 10
13 Exp. less Admin/ Exp. Tot.	0.7570	0.7570	Line 6/ Line 8

**SOURCE, Lines 1-7, Per Mile**

Line 1: Pg 6 Ln 9 Total  
 Line 2: Pg 6 Ln 10 Total  
 Line 3: Pg 6 Ln 11 Total  
 Line 4: Pg 6 Ln 12 Total  
 Line 5: Pg 6 Ln 13 Total  
 Line 6: Pg 6 Ln 14 Total  
 Line 7: Pg 6 Ln 15 Total

**SOURCE, Lines 1-7 Fixed**

Line 1: Pg 7 Ln 9 Total + Pg 8 Ln 9 Total  
 Line 2: Pg 7 Ln 10 Total + Pg 8 Ln 10 Total  
 Line 3: Pg 7 Ln 11 Total + Pg 8 Ln 11 Total  
 Line 4: Pg 7 Ln 12 Total + Pg 8 Ln 12 Total  
 Line 5: Pg 7 Ln 13 Total + Pg 8 Ln 13 Total  
 Line 6: Pg 7 Ln 14 Total + Pg 8 Ln 14 Total  
 Line 7: Pg 7 Ln 15 Total + Pg 8 Ln 15 Total

Note: DS3 Interoffice does not have a Nonrecurring charge.



PACIFIC BELL DS3X12 5 YR TERM COST CALCULATION - 14-Jan-93

PER CHANNEL TERMINATION				
	A	B		
Account Number	244149	242212		SOURCE, Col. A, B
Account Description	CONDUIT	FIBER		
Cost Factors				
1 Net Plant	0.7584	0.8600		1992 Rates and Factors
2 FCC RIT	0.1214	0.1541		1992 Rates and Factors
3 St/Fed Tax as a % of RIT	0.2835	0.2835		Appendix A
4 Cost of Money	0.0660	0.0950		Ln 1 * Ln 2 * (1 - Ln 3)
5 State & Fed Taxes	0.0261	0.0376		Ln 1 * Ln 2 * Ln 3
6 Depreciation	0.0220	0.0440		1992 Rates and Factors
7 Repair and Maintenance	0.0113	0.0053		1992 Rates and Factors
8 Administrative Expense Factor (applied to all other expenses)	0.3210	0.3210		1992 Rates and Factors
			Total (A+B)	
9 Gross Investment	\$8,204	\$36,195	\$44,399	1993 Invest. Study
Annual Cost				
10 Cost of Money	\$541	\$3,437	\$3,978	Ln 4 * Ln 9
11 State & Fed Taxes	\$214	\$1,360	\$1,574	Ln 5 * Ln 9
12 Depreciation	\$180	\$1,593	\$1,773	Ln 6 * Ln 9
13 Repair and Maintenance	\$93	\$192	\$285	Ln 7 * Ln 9
14 Subtotal of Expenses	\$1,029	\$6,581	\$7,610	Sum (Ln 10...Ln 13)
			\$0	
15 Administration	\$330	\$2,113	\$2,443	Ln 14* Ln 8
16 Total	\$1,359	\$8,694	\$10,052	Ln 14 + Ln 15

PACIFIC BELL DS3X12 5 YR TERM COST CALCULATION - 14-Jan-93

	A	B		
Account Number	211100	212100		SOURCE, Col. A, B
Account Description	LAND	BUILDING		
<b>Cost Factors</b>				
1 Net Plant	1.0000	0.8588		1992 Rates and Factors
2 FCC RIT	0.1614	0.0806		1992 Rates and Factors
3 St/Fed Tax as a % of RIT	0.2835	0.2835		Appendix A
4 Cost of Money	0.1156	0.0496		Ln 1 * Ln 2 * (1 - Ln 3)
5 State & Fed Taxes	0.0000	0.0196		Ln 1 * Ln 2 * Ln 3
6 Depreciation	0.0220	0.0290		1992 Rates and Factors
7 Repair and Maintenance	0.0113	0.0261		1992 Rates and Factors
8 Administrative Expense Factor (applied to all other expenses)	0.3210	0.3210		1992 Rates and Factors
			Total (A+B)	
9 Gross Investment	\$1,270	\$14,825	\$16,095	1993 Investment Study
<b>Annual Cost</b>				
10 Cost of Money	\$147	\$735	\$882	Ln 4 * Ln 9
11 State & Fed Taxes	\$0	\$291	\$291	Ln 5 * Ln 9
12 Depreciation	\$28	\$430	\$458	Ln 6 * Ln 9
13 Repair and Maintenance	\$14	\$387	\$401	Ln 7 * Ln 9
14 Subtotal of Expenses	\$189	\$1,843	\$2,032	Sum (Ln 10...Ln 13)
			\$0	
15 Administration	\$61	\$592	\$652	Ln 14* Ln 8
			\$0	
16 Account Total	\$250	\$2,435	\$2,684	Ln 14 + Ln 15

PACIFIC BELL DS3X12 5 YR TERM COST CALCULATION - 14-Jan-93

A

Account Number	223210	SOURCE, Col. A	
Account Description	DIGITAL CIRCUIT		
Cost Factors			
1 Net Plant	0.5480		1992 Rates and Factors
2 FCC RIT	0.1547		1992 Rates and Factors
3 St/Fed Tax as a % of RIT	0.2835		Appendix A
4 Cost of Money	0.0607		Ln 1 * Ln 2 * (1 - Ln 3)
5 State & Fed Taxes	0.0240		Ln 1 * Ln 2 * Ln 3
6 Depreciation	0.0850		1992 Rates and Factors
7 Repair and Maintenance	0.0143		1992 Rates and Factors
8 Administrative Expense Factor (applied to all other expenses)	0.3210		1992 Rates and Factors
		Total	
9 Gross Investment	\$324,003	\$324,003	1993 Investment Study
Annual Cost			
10 Cost of Money	\$19,680	\$19,680	Ln 4 * Ln 9
11 State & Fed Taxes	\$7,787	\$7,787	Ln 5 * Ln 9
12 Depreciation	\$27,540	\$27,540	Ln 6 * Ln 9
13 Repair and Maintenance	\$4,633	\$4,633	Ln 7 * Ln 9
14 Subtotal of Expenses	\$59,641	\$59,641	Sum (Ln 10...Ln 13)
		\$0	
15 Administration	\$19,145	\$19,145	Ln 14* Ln 8
		\$0	
16 Total	\$78,786	\$78,786	Ln 14 + Ln 15

PACIFIC BELL DS3 INTEROFFICE MI COST CALCULATION - 14-Jan-93

MILEAGE VARIABLE, PER DS3 MILE

	A	B		
Account Number	244149	242222		SOURCE
Account Description	CONDUIT	FIBER		
<b>Cost Factors</b>				
1 Net Plant	0.7584	0.7614		1992 Rates and Factors
2 FCC RIT	0.1214	0.1345		1992 Rates and Factors
3 St/Fed Tax as a % of RIT	0.2835	0.2835		Appendix A
4 Cost of Money	0.0660	0.0734		Ln 1 * Ln 2 * (1 - Ln 3)
5 State & Fed Taxes	0.0261	0.0290		Ln 1 * Ln 2 * Ln 3
6 Depreciation	0.0220	0.0780		1992 Rates and Factors
7 Repair and Maintenance	0.0113	0.0017		1992 Rates and Factors
8 Administrative Expense Factor (applied to all other expenses)	0.3210	0.3210		1992 Rates and Factors
			Total (A+B)	
9 Gross Investment	\$323	\$1,425	\$1,748	1993 Invest. Study
<b>Annual Cost</b>				
10 Cost of Money	\$21	\$105	\$126	Ln 4 * Ln 9
11 State & Fed Taxes	\$8	\$41	\$50	Ln 5 * Ln 9
12 Depreciation	\$7	\$111	\$118	Ln 6 * Ln 9
13 Repair and Maintenance	\$4	\$2	\$6	Ln 7 * Ln 9
14 Subtotal of Expenses	\$40	\$260	\$300	Sum (Ln 10...Ln 13)
15 Administration	\$13	\$83	\$96	Ln 14* Ln 8
16 Total	\$53	\$343	\$396	Ln 14 + Ln 15

PACIFIC BELL DS3 INTEROFFICE MI COST CALCULATION - 14-Jan-93

MILEAGE FIXED, PER DS3 CHANNEL

A

Account Number	223210	SOURCE	
Account Description	DIGITAL CIRCUIT		
Cost Factors			
1 Net Plant	0.5480		1992 Rates and Factors
2 FCC RIT	0.1547		1992 Rates and Factors
3 St/Fed Tax as a % of RIT	0.2835		Appendix A
4 Cost of Money	0.0607		Ln 1 * Ln 2 * (1 - Ln 3)
5 State & Fed Taxes	0.0240		Ln 1 * Ln 2 * Ln 3
6 Depreciation	0.0850		1992 Rates and Factors
7 Repair and Maintenance	0.0143		1992 Rates and Factors
8 Administrative Expense Factor (applied to all other expenses)	0.3210		1992 Rates and Factors
		Total	
9 Gross Investment	\$23,176	\$23,176	1993 Investment Study
Annual Cost			
10 Cost of Money	\$1,408	\$1,408	Ln 4 * Ln 9
11 State & Fed Taxes	\$557	\$557	Ln 5 * Ln 9
12 Depreciation	\$1,970	\$1,970	Ln 6 * Ln 9
13 Repair and Maintenance	\$331	\$331	Ln 7 * Ln 9
14 Subtotal of Expenses	\$4,266	\$4,266	Sum (Ln 10...Ln 13)
15 Administration	\$1,369	\$1,369	Ln 14* Ln 8
16	Total	\$5,636	Ln 14 + Ln 15

PACIFIC BELL DS3 INTEROFFICE MI COST CALCULATION - 14-Jan-93

MILEAGE FIXED, PER DS3 CHANNEL

	A	B		
Account Number	211100	212100		SOURCE
Account Description	LAND	BUILDING		
<b>Cost Factors</b>				
1 Net Plant	1.0000	0.8588		1992 Rates and Factors
2 FCC RIT	0.1614	0.0806		1992 Rates and Factors
3 St/Fed Tax as a % of RIT	0.2835	0.2835		Appendix A
4 Cost of Money	0.1156	0.0496		Ln 1 * Ln 2 * (1 - Ln 3)
5 State & Fed Taxes	0.0000	0.0196		Ln 1 * Ln 2 * Ln 3
6 Depreciation	0.0220	0.0290		1992 Rates and Factors
7 Repair and Maintenance	0.0113	0.0261		1992 Rates and Factors
8 Administrative Expense Factor (applied to all other expenses)	0.3210	0.3210		1992 Rates and Factors
			Total (A+B)	
9 Gross Investment	\$264	\$3,085	\$3,349	1993 Investment Study
<b>Annual Cost</b>				
10 Cost of Money	\$31	\$153	\$184	Ln 4 * Ln 9
11 State & Fed Taxes	\$0	\$61	\$61	Ln 5 * Ln 9
12 Depreciation	\$6	\$89	\$95	Ln 6 * Ln 9
13 Repair and Maintenance	\$3	\$81	\$83	Ln 7 * Ln 9
14 Subtotal of Expenses	\$39	\$383	\$423	Sum (Ln 10...Ln 13)
15 Administration	\$13	\$123	\$136	Ln 14 * Ln 8
16 Total	\$52	\$507	\$559	Ln 14 + Ln 15

PACIFIC BELL

**APPENDIX A**

**FCC AUTHORIZED COST OF MONEY**

	PROPORTION	COST	WTD COST
DEBT	44.20%	8.80%	3.89%
EQUITY	55.80%	13.20%	<u>7.36%</u>
			11.25%

**TAX COMPONENT OF RIT**

RATE OF RETURN (A)	11.25%
DEBT RATIO (B)	44.20%
COST OF DEBT (C)	8.80%
COST OF EQUITY (D)	13.20%
FEDERAL AND STATE TAX RATE (E)	43.30%

Federal Tax Rate = .3400, State Tax Rate = .0930, Combined Tax Rate = .4330

The fraction of RIT that is taxes =  $E * ((1-B) * D/A) = 0.2835$

**January 22, 1993**

**Cheryl Tritt, Chief  
Common Carrier Bureau  
Federal Communications Commission  
Mail Stop 1170  
1919 M Street, N.W., Room 500  
Washington, D.C. 20554**

**Dear Ms. Tritt:**

**Re: *Correction to Cost Studies***

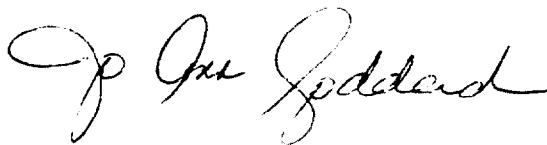
**On January 15, 1993, Pacific Bell provided cost studies in response to your December 18, 1992, request for data. The attached pages contain corrections to some of the data provided. Specifically, the corrected data are on:**

<b>Page 1</b>	<b>Lines 8, 15 &amp; 16</b>
<b>Page 2</b>	<b>Line 8</b>

**Pacific Bell regrets any inconvenience to you or your staff as a result of these inadvertent errors.**

**Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.**

**Sincerely,**



**Enclosures**



PACIFIC BELL DS3X12 5 YR TERM COST CALCULATION - 20-Jan-93

**COST SUMMARY, PER CHANNEL TERMINATION**

<b>1 Gross Investment</b>	<b>\$384,497</b>	<b>See Section 1.2</b>
<b><u>Annual Cost</u></b>		
2 Cost of Money	\$24,541	See Section 1.3
3 State & Fed Taxes	\$9,652	See Section 1.3
4 Depreciation	\$29,771	See Section 1.3
5 Repair and Maintenance	\$5,319	See Section 1.3
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7 Administration	\$22,240	See Section 1.3
8 <b>Total Direct Cost</b>	<b>\$91,523</b>	<b>Ln 6 + Ln 7</b>
9 <b>Monthly Cost</b>	<b>\$7,627</b>	<b>Ln 8/12</b>
10 <b>Monthly Rate</b>	<b>\$9,982</b>	<b>Pacific Bell FCC 128 Tariff</b>
11 <b>Cost/ Unit Investment</b>	<b>0.2380</b>	<b>Line 8/ Line 1</b>
12 <b>Cost/ Mon. Rate</b>	<b>0.7641</b>	<b>Line 9/ Line 10</b>
13 <b>Exp less Admin/ Exp Tot.</b>	<b>0.7570</b>	<b>Line 6/ Line 8</b>
<b>SOURCE, Lines 1-7</b>		
Line 1: Pg 3 Ln 9 Total + Pg 4 Ln 9 Total + Pg 5 Ln 9 Total		
Line 2: Pg 3 Ln 10 Total + Pg 4 Ln 10 Total + Pg 5 Ln 10 Total		
Line 3: Pg 3 Ln 11 Total + Pg 4 Ln 11 Total + Pg 5 Ln 11 Total		
Line 4: Pg 3 Ln 12 Total + Pg 4 Ln 12 Total + Pg 5 Ln 12 Total		
Line 5: Pg 3 Ln 13 Total + Pg 4 Ln 13 Total + Pg 5 Ln 13 Total		
Line 6: Pg 3 Ln 14 Total + Pg 4 Ln 14 Total + Pg 5 Ln 14 Total		
Line 7: Pg 3 Ln 15 Total + Pg 4 Ln 15 Total + Pg 5 Ln 15 Total		
14 <b>Nonrecurring Costs</b>	<b>\$4,970</b>	<b>See Section 1.4</b>
15 <b>Nonrecurring Rate</b>	<b>\$17,750</b>	<b>Pacific Bell FCC 128 Tariff</b>
16 <b>NR Cost/ Rate</b>	<b>0.2800</b>	<b>Line 14/ Line 15</b>

PACIFIC BELL DS3 INTEROFFICE MI COST CALCULATION - 20-Jan-93

**COST SUMMARY, DS3 INTEROFFICE MILEAGE**

	PER MILE	FIXED	
1 <b><u>Gross Investment</u></b>	\$1,748	\$26,525	See Section 1.2
<b><u>Annual Cost</u></b>			
2 Cost of Money	\$126	\$1,591	See Section 1.3
3 State & Fed Taxes	\$50	\$618	See Section 1.3
4 Depreciation	\$118	\$2,065	See Section 1.3
5 Repair and Maintenance	\$6	\$415	See Section 1.3
6 Subtotal of Expenses	\$300	\$4,689	
7 Administration	\$96	\$1,505	See Section 1.3
8 <b>Total Direct Cost</b>	\$396	\$6,194	Ln 6 + Ln 7
9 <b>Monthly Cost</b>	\$33	\$516	Ln 8/12
10 <b>Monthly Rate</b>	\$43.70	\$833.14	Pacific Bell FCC 128 Tariff
11 Cost/Unit Investment	0.2267	0.2335	Line 8/ Line 1
12 Cost/ Monthly Rate	0.7557	0.6196	Line 9/ Line 10
13 Exp. less Admin/ Exp. Tot.	0.7570	0.7570	Line 6/ Line 8

**SOURCE, Lines 1-7, Per Mile**

Line 1: Pg 6 Ln 9 Total  
 Line 2: Pg 6 Ln 10 Total  
 Line 3: Pg 6 Ln 11 Total  
 Line 4: Pg 6 Ln 12 Total  
 Line 5: Pg 6 Ln 13 Total  
 Line 6: Pg 6 Ln 14 Total  
 Line 7: Pg 6 Ln 15 Total

**SOURCE, Lines 1-7 Fixed**

Line 1: Pg 7 Ln 9 Total + Pg 8 Ln 9 Total  
 Line 2: Pg 7 Ln 10 Total + Pg 8 Ln 10 Total  
 Line 3: Pg 7 Ln 11 Total + Pg 8 Ln 11 Total  
 Line 4: Pg 7 Ln 12 Total + Pg 8 Ln 12 Total  
 Line 5: Pg 7 Ln 13 Total + Pg 8 Ln 13 Total  
 Line 6: Pg 7 Ln 14 Total + Pg 8 Ln 14 Total  
 Line 7: Pg 7 Ln 15 Total + Pg 8 Ln 15 Total

Note: DS3 Interoffice does not have a Nonrecurring charge

Al Swan  
Executive Director  
Regulatory

1401 New Montgomery Street, Room 118  
San Francisco, California 94105  
(415) 542-0370

**PACIFIC BELL**  
A Pacific Telesis Company

October 15, 1993

Gregory J. Vogt  
Chief, Tariff Division  
Common Carrier Bureau  
Federal Communications Commission  
1919 M Street, N. W.  
Room 518  
Washington, D.C. 20554

Dear Mr. Vogt:

In reply to your letter of September 24, 1993, Pacific Bell is writing to confirm its Special Access High Capacity cost and rate information previously provided to Chuck Needy of your staff, with certain exceptions noted below.

The set of fifteen tables that was attached to your letter contained data that had been rounded. For example, Pacific Bell's Special Access High Capacity DS3 Mileage Termination rate is \$833.14, rather than \$833 as shown on Tables 8 and 9. Also, the per mile rate for DS3 service is \$43.70, rather than \$44. The cost data has also been rounded.

The impact of the rounding on the analysis is de minimis. For example, on Table 9, The "Total Service Norm. Monthly Rate (8-Mile Chan.)" is stated as \$1185. The correct total is \$1182.60. Again, we do not believe the rounding to be of consequence to the analysis.

Otherwise, Mr. Needy's tables reflect all of the cost data or cost development data information that we have provided on this matter.

Per your request, an original and two copies of this letter are submitted to the Tariff Division, Common Carrier Bureau.

All written correspondence in connection with this matter should be addressed to me at the above address. All other inquiries may be directed to J. A. Goddard on (202) 383-6429.

ccf A E Swan

Copy of Letter concurrently delivered to:  
Policy and Program Planning Division (2 Copies)  
International Transcription Service, Inc. (ITS)

MU

Ann Goddard  
Director  
Federal Regulatory Relations

1275 Pennsylvania Avenue, N.W., Suite 400  
Washington, D.C. 20004  
(202) 383-6429

PACIFIC  TELESIS  
Group - Washington

May 14, 1993

Kathleen Levitz, Acting Chief  
Common Carrier Bureau  
Federal Communications Commission  
Mail Stop 1600  
1919 M Street, N.W., Room 500  
Washington, D.C. 20554

RECEIVED  
MAY 17 3 01 PM '93  
DIVISION

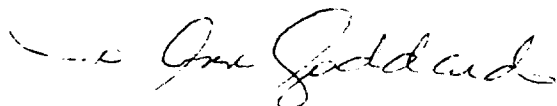
Dear Ms. Levitz:

Re: Data Request Concerning High Capacity Special Access Tariffs

On behalf of Pacific Bell, please find enclosed an original and three copies of its "Response" to the Commission's letter of April 23, 1993, concerning the above-referenced data request.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,

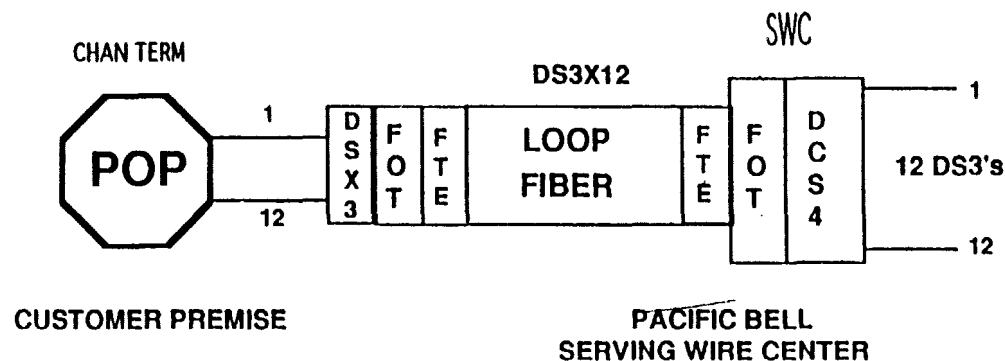


Enclosures

# I. GENERAL

## DS3X12 TERMINAL EQUIPMENT (ELECTRICAL INTERFACE) - 5 YEAR PLAN

1. NUMBER OF DS3X12 (ELECTRICAL INTERFACE) UNDER A 5 YEAR PLAN = 1,  
CIRCUIT BILLING NUMBER = 11HHGS399001-002.
2. FUNCTIONAL DIAGRAM



3. THIS CIRCUIT HAS NO CHANNEL MILEAGE SEGMENTS OR ASSOCIATED MILEAGE.
4. THIS CIRCUIT HAS ONE (1) CHANNEL TERMINATION AND NO ASSOCIATED MILEAGE.

FOT = FIBER OPTIC TERMINAL  
FTE = FIBER TERMINATING EQUIPMENT  
POP = POINT OF PRESENCE  
DCS 4 = DIGITAL CROSS-CONNECT SYSTEM 3/1  
DSX 3 = DIGITAL SYSTEM CROSS-CONNECT 3/3

## II. EQUIPMENT

### A. DS3 Channel Termination

The DS3X12 Channel Termination provides a channel from a customer or carriers premises to the Pacific Bell serving central office. This serving arrangement uses fiber optic terminals with 12 DS3 capacity at each end of the circuit with fiber cable connecting them. Fiber optic terminals function as signal converters, optical to electrical and electrical to optical. Fiber terminating equipment is used to connect the optical side of the terminal with the fiber transmit and receive strands.

Electrical terminating equipment is used to connect the fiber optic terminal with the DS3 signal. The DS3X12 channel termination includes connection points for 12 DS3 connections to the terminal. These connection points at the customer premises are jack fields usually referred to as DSX3 connections. A digital cross-connect system (DCS) in the central office provides the same function and allows DS3 connections to be remotely provisioned.

D.C. power with battery back up is available in Pacific Bell central offices for powering the equipment. D.C. power equipment with battery back up is installed at customer locations. Pacific Bell also provides an enclosure for the premises serving arrangement to protect the equipment.

Fiber plant requirements include feeder cable, fiber distribution points and lateral cable. Fiber feeder cable connect the central office with the fiber distribution point. The fiber distribution point is a unit consisting of two fiber optic cable closures and two cable stubs. The lateral fiber connects the fiber distribution point with the fiber termination equipment in the customers building. Conduit for the feeder and lateral fiber are also required to protect the fiber plant.

Listed below by general category are the equipment and plant used to provide a DS3X12 channel termination.

Central Office Equipment: Fiber optic terminals and associated fiber terminating equipment, power and battery equipment, DSX3 and DCS cross connection equipment

Cable and Wire Facilities: Fiber plant and conduit used to enclose and protect the fiber.

General Support Facilities: Land and Building associated with the central office equipment required for the DS3x12.

## II. EQUIPMENT, Continued

### B. DS3 Channel Mileage

DS3 Channel Mileage provides a DS3 channel between 2 Pacific Bell central offices. This serving arrangement requires a fiber optic terminal in each central office with interoffice fiber cable connecting them. Fiber optic terminals function as signal converters, optical to electrical and electrical to optical. Fiber terminating equipment is used to connect the optical side of the terminal with the fiber transmit and receive strands.

Electrical terminating equipment is used to connect the fiber optic terminal with the DS3 signal. A digital cross-connect system (DCS) in the central office provides this function and allows DS3 connections to be remotely provisioned. D.C. power with battery back up is available in Pacific Bell central offices for powering all central office equipment.

Fiber plant requirements include interoffice fiber cable which is 1x1 protected with diverse routing. Mid span optical regeneration is not required as span lengths are less than 25 miles. Conduit for the feeder and lateral fiber are also required to protect the fiber plant.

Listed below by general category plant are the equipment and plant described above used to provide a DS3 Channel Mileage.

Central Office Equipment: Fiber optic terminals and associated fiber terminating equipment, power and battery equipment, DSX3 and DCS cross connection equipment

Cable and Wire Facilities: Interoffice fiber plant and conduit.

General Support Facilities: Land and building associated with the central office equipment required for the DS3 mileage fixed service

### III. INVESTMENT

Unit investment is identified based on the current cost and average expected utilization of the plant or equipment over its economic life. Non-reusable investment was capitalized over the 5 year term of this service. Land and building investment is identified based on the relationship between land, building and central office equipment. Conduit investment is identified based on a proration of conduit investment to fiber plant.

1. The investment associated with each item of plant needed to provide a channel termination is identified in Worksheets A and B. Worksheet A demonstrates the calculation of fiber investment per channel termination. Worksheet B identifies investment associated with each item of central office equipment. Worksheet C identifies average utilization associated with central office channel termination equipment. Worksheet D displays the associated land and building investment
2. Worksheets D and E display investment associated with DS3 interoffice mileage. Worksheet D demonstrates the identification of central office equipment investment associated with Mileage Fixed. It also displays the associated land and building investment. Worksheet E identifies fiber and conduit investment per mile.
3. "Engineering Furnished and Installed" (EF&I) costs are typically calculated by applying factors to equipment costs. The EF&I factor for fiber optical terminals and related equipment is approximately 1.54. EF&I investment is generally the starting point for adding utilization, channel allocations, and power loadings to develop a fully loaded unit investment. Nonrecurring installation labor rates and labor times for installation of a DS3x12 channel termination to a customer are shown on Worksheet F.
4. Pacific Bell's DS3x12 channel termination rate element is not distance sensitive. It is offered only where facilities are available at the same rate to all customers. Investment for cable and wire facilities expressed per DS3X12 channel termination is shown in Worksheet A.  
Channel Termination fiber investment is associated with an average distance of 21,292 feet or about 4 miles ( 21,292/ 5280 ft per mile = 4 miles). The fiber cost per mile including diverse routing is  $\$36,196/2 = \$18098$ .

The fiber investment calculation for interoffice DS3 mile is shown in Worksheet E. This calculation demonstrates the cumulative effects of 1x1 protection, converting route mile investment to air mile investment, utilization and channel allocation necessary for the "Per DS3 mile" tariffed service offering. Pacific offers no term or volume discounts with DS3 interoffice mileage. The fiber investment per investment per DS3 air mile is \$1, 425

5. Worksheet G identifies the depreciation life and net salvage factors prescribed by the FCC. The net salvage value (salvage value less cost of removal) is also shown. This calculation is based on unit costs multiplied by the prescribed net salvage factor.



**WORKSHEET A**

**EXCHANGE FIBER INVESTMENT**

A	B	C	D	E	F
\$ PER FOOT (STRAND)	\$ CHANNEL A*2	FIBER FT W DIVERSITY	UTILIZATION*	CHANNELS (1 3X12 CHAN)	DS3X12 CHAN TERM INV B*C/D/E
0.17	\$0.34	21292	0.2	1	\$36,196
					CONDUIT LOADING F*.227
					\$8,205

**SOURCES**

A: 1991 VINTAGE RETIREMENT UNIT COSTS

B: TRANSMIT AND RECEIVE (2 STRANDS)

C: AVERAGE FIBER FOOTAGE FOR NONCOLLOCATED DS3X12 CUSTOMERS SEE BELOW

D: CONSERVATIVE ESTIMATE OF AVERAGE LOOP FIBER UTILIZATION \*

E: CHANNEL ALLOCATION, 1 DS3X12 CHANNEL

\*Expected long run fiber feeder utilization is 65% to 75%.

**AVG FEET PER DS3X12 LOCATION**

	A	B*	C	D
RING LOCATION	RING FEET	DS3X12'S	WTG	WTD FT (A*C)
LA MADISON	16,065	2	0.1429	2,295
SACRAMENTO 01	29,824	2	0.1429	4,261
SAN FRAN 21	14,651	3	0.2143	3,140
OAKLAND 03	48,908	1	0.0714	3,493
ANAHEIM 01	7,000	4	0.2857	2,000
SAN JOSE 02	42,723	2	0.1429	6,103
TOTAL		14	1.0000	21,292

RING FEET FROM ENGINEERING RECORDS

\*INCLUDES DS3X12 WITHOUT EQUIPMENT